

ABSTRACT OF THE DISCLOSURE

A switched reluctance drive, operating either as a motor or a generator, is controlled in a stable manner in the continuous current mode in the presence of supply voltage or electrical load variation. The use of a current control parameter I_x in addition to the conventional on- and off-angles θ_{on} , θ_{off} gives the ability to operate smoothly in the continuous current mode and to transition smoothly between operating modes. Once the phase current reaches a pre-determined level I_x , the phase winding may be placed in a freewheel state, thereby controlling the standing current in the phase winding and/or the output voltage.